



RECEIVED

SEP 25 2001

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TO 1700

In re Application of:

Hiroyuki OHTAKI et al.

Group Art Unit: 1756

Serial No.: 09/288,569

Examiner: Martin J. Angebranndt

Filed: April 9, 1999

For: VOLUME HOLOGRAM LAMINATE AND LABEL FOR PREPARATION OF VOLUME  
HOLOGRAM LAMINATE

ARGUMENT AND DOCUMENTATION IN REBUTTAL OF  
COMMENTS IN ADVISORY ACTION

Commissioner for Patents  
Washington, D. C. 20231

Sir:

Applicants provide the following argument and documentation to rebut the comments in the Advisory Action mailed August 2, 2001.

In that document, it was asserted that (1) PVB and synthesis resin oligomers "are held to be tackifiers" and (2) among the cited references, there is discussion of adhesive layers most of which "have a binder which would act as a tackifier."

Applicants respectfully submit that those of skill in the art would regard none of the reference adhesives to be tackifiers. Binder polymers do not function as tackifiers and, in general, adhesives comprise a polymer binder. A tackifier can be added to

9/29/01  
#12 AMM/LEADER  
PLEASE ACCEPT THIS AS  
AUTHORIZATION TO DEBIT  
OR CREDIT FEES TO  
DEP. ACCT. 16-0331  
PARKHURST & WENDEL

control tackiness of the adhesive but an adhesive is not a tackifier.

Enclosed in support of applicants' position are pages from the Handbook of Pressure Sensitive Adhesive Technology which states on the first page of Chapter 16, "The properties of a pressure-sensitive adhesive depend primarily on the viscoelastic nature of the adhesive mass. In formulating a pressure-sensitive adhesive, an elastomer or rubbery polymer provides the elastic component while a low molecular weight tackifying resin constitutes the viscous component."

The enclosed document therefore shows that a binder polymer and a tackifier function differently. A binder polymer such as an elastomer or rubbery polymer function as an elastic component while a tackifier functions as a viscous component. In other words, a binder polymer such as an elastomer or rubbery polymer does not function as a tackifier. PVB is a typical binder polymer.

Applicants also inform the Examiner that NOA-61 is a type of photocurable liquid adhesive comprising a polymerization initiator and a photopolymerizing monomer. NOA-61 may optionally include a binder polymer and, as explained above, a binder polymer does not function as an tackifier.

Applicants again respectfully submit that none of the references applied against the claims teach or suggest the use of

a tackifier as a substance to shift a recorded wavelength of a volume hologram layer.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.



Charles A. Wendel  
Registration No. 24,453

September 21, 2001  
Date

CAW/ch

Enclosure:

Pages from Handbook of  
Pressure-Sensitive Adhesive Technology

Attorney Docket No.: DAIN:499

PARKHURST & WENDEL, L.L.P.  
1421 Prince Street, Suite 210  
Alexandria, Virginia 22314-2805  
Telephone: (703) 739-0220